

REPLACEMENT SHEET

1/15

FIG. 1

Sequence	MB DNA (%)	EC DNA (%)	fold (MB/EC)
GGCGCC=	0.1462	0.0020	73.12
GCCGGC=	0.2317	0.0062	37.19
GTCGAC=	0.0990	0.0116	8.56
CTCGAG=	0.0299	0.0038	7.96
CCCGGG=	0.0645	0.0091	7.13
CACGTG=	0.0205	0.0030	6.74
CCCGAG=	0.0451	0.0069	6.58
CTCGGG=	0.0392	0.0068	5.75
GCCGAC=	0.1435	0.0297	4.83
GTCGGC=	0.1400	0.0295	4.74
CTCGGC=	0.1021	0.0217	4.71
GCCGAG=	0.1000	0.0218	4.58
GACGAG=	0.0493	0.0120	4.10
GCCGGG=	0.1781	0.0435	4.09
GACGTC=	0.0619	0.0151	4.09
GTCGAG=	0.0577	0.0166	4.08
GTCGTC=	0.0755	0.0192	3.93
CTCGAC=	0.0643	0.0165	3.90
CCCAGC=	0.0676	0.0175	3.86
CTCGTC=	0.0501	0.0130	3.86
CGCGGC=	0.1751	0.0455	3.85
GTCGGG=	0.0627	0.0165	3.79
TCCGAG=	0.0203	0.0054	3.78
GACGAC=	0.0747	0.0199	3.76
CTCGGA=	0.0202	0.0054	3.73
GC CGCC=	0.2336	0.0654	3.58
GCCGTC=	0.1008	0.0296	3.41
GGCGGC=	0.2237	0.0662	3.38
GCCGGT=	0.1302	0.0402	3.24
CCCGGC=	0.1183	0.0365	3.24
GACGGC=	0.1033	0.0327	3.16
CCCGCC=	0.0824	0.0263	3.13
GCCGGG=	0.1165	0.0373	3.13
CGCGGG=	0.0849	0.0273	3.11
ACCGGC=	0.1242	0.0405	3.07
GGCGGG=	0.0982	0.0323	3.04
CCCGCC=	0.0995	0.0329	3.02
CGCGGT=	0.1117	0.0372	3.00
ACCGCG=	0.1090	0.0368	2.97
ACCGAG=	0.0511	0.0175	2.92
GTCGGA=	0.0331	0.0118	2.80
GGCGAC=	0.1005	0.0360	2.80
CTCGGT=	0.0494	0.0178	2.78
GTCGCC=	0.1055	0.0383	2.76
GTCGCG=	0.0884	0.0323	2.74
CACGTC=	0.0430	0.0158	2.73
TCCGAC=	0.0326	0.0121	2.70
CGCGAC=	0.0852	0.0320	2.66
Average	0.0498	0.0298	
Sum	12.7440	7.3665	

REPLACEMENT SHEET

2/15

FIG. 2

a)

SEQUENCE ID No.:		
MB-ODN 4/5 (-CGXXCGXXCG-)		
No.	Sequence	Score
1	CTCCAcgGgcgGCAcgGCCA	11811
2	TGTCgGgcgGCAcgGTTG	11773
3	CRAGGcgGTCgGTCgGTCG	11538
4	AACGcgGAcgTGGcgGCGG	10931
5	GTCAGcgGAcgTGGcgGCTC	10829
6	AAGGcgGTCgGTCgGCC	10697
7	CTCAGcgGgcgGCAcgTGCA	10670
8	CACGAcgGgcgGTCgGCTT	10319
9	ATGAcgGgcgGTCgGATC	10240
10	GATGcgGAcgGTCgGCCA	10199
11	CAGCcgGTCgTGGcgGCAT	9962
12	GCCTGcgGgcgGAGGcgATTC	9855
13	TGTTGcgGTCgGTCgGCG	9839
14	GGTGcgGTCgGAGGcgGCTT	9728
15	GGTGcgGTCgGTCgGCC	9259
16	GGGGcgGTCgGTCgGCA	9250
17	GACA TcgGTCgGTCgGTCG	9098
18	CCAGTcgGgcgGGGcgGTCG	9022
19	TCTGGcgGTCgGAGGcgGCC	8953
20	CACGTCgGTCgGgcgGCCA	8878
21	TTTGGcgGTCgGTCgGCG	8869
22	CCAGGcgGTCgGTCgGCG	8869
23	CTCC TcgGTCgGAGGcgGTCG	8844
24	ACCA TcgGTCgGCCcgGCTC	8780
25	CACGAcgGTCgGTCgGCTG	8615
333	GTGTTcgGAcgGTCgGACG	1681
334	AGGTCgGAcgGTCgGAG	1637
335	ACTGcgGTCgGTCgGACG	1539

b)

SEQUENCE ID No.:		
MB-ODN 5/5 (-CGXXCGXXCG-)		
No.	Sequence	Score
1	TGCTcgGgcgGTCgGCGAG	12668
2	GAGGcgGTCgGTCgGCTC	12589
3	TTGGcgGTCgGTCgGCTC	11345
4	GAGGcgGTCgGgcgGCC	11280
5	AAGGcgGTCgGTCgGCA	11258
6	CAGGcgGTCgGTCgGCTC	10614
7	GTTGcgGAcgGTCgGCT	10297
8	GGGGcgGTCgGTCgGCA	10243
9	TGTCcgGgcgGTCgGCTC	10153
10	ATCAcgGTCgGgcgGCCA	10063
11	GTGGcgGTCgGTCgGCT	10059
12	AAGGcgGTCgGTCgGTCG	10036
13	GAGGcgGgcgGTCgGCTC	9743
14	AATTcgGTCgGTCgGCA	9712
15	CAGGcgGTCgGTCgGCT	9657
16	TAGGcgGTCgGTCgGCA	9655
17	GTCGcgGTCgGTCgGCG	9390
18	GCTTCgGTCgGTCgGCG	9269
19	GTGTCgGgcgGTCgGCA	9164
20	TTGGcgGTCgGTCgGCTC	9034
21	TCACTcgGTCgGTCgGCA	8959
22	GAGGcgGgcgGTCgGCA	8873
23	TAGGcgGTCgGTCgGCTC	8845
24	CAGGcgGTCgGTCgGCTC	8703
25	CTGAcgGTCgGTCgGCTC	8642
332	ATTGcgGTCgGTCgGCTC	1807
333	TACTcgGTCgGTCgGCTC	1713
334	CATGcgGTCgGTCgGCTC	1219

REPLACEMENT SHEET

3/15

FIG. 3

a)

b)

SEQUENCE ID No.:

MB-ODN 4/5 (-CGXXCGXXCG-)

74

SEQUENCE ID No.:

MB-ODN 5/5 (-CGXXCGXXCG-)

110

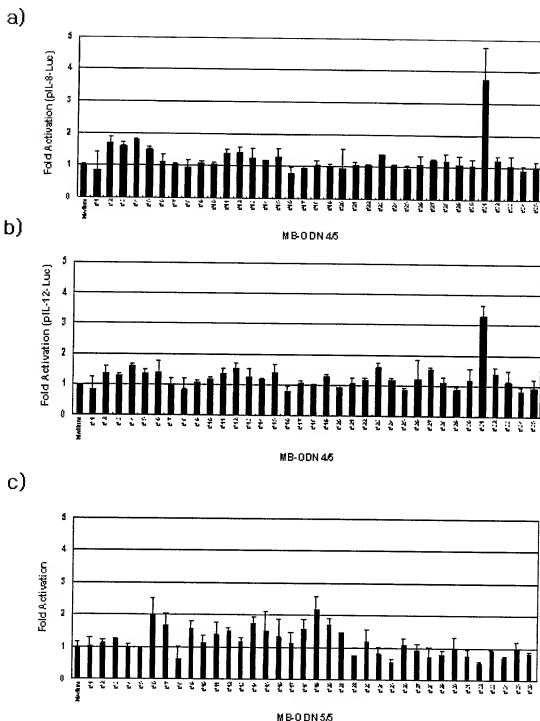
ODN	Sequence	
MB-ODN4/5-1	CCAGTCGCGCGCGCGCGCTGC	75
MB-ODN4/5-2	GCCTGCGCGCGCGCGCGCTTC	76
MB-ODN4/5-3	ACCAACGCGCGCGCGCGCTGC	77
MB-ODN4/5-4	CGTCGCGCGCGCGCTTCGCGCTC	78
MB-ODN4/5-5	CGCAACGCGCGCGCGCTTCGCGCTC	79
MB-ODN4/5-6	CTTCGCGCGCGCGCTTCGCGCTC	80
MB-ODN4/5-7	AACTGCGCGCGCGCTTCGCGCTC	81
MB-ODN4/5-8	GCCTCAGCGCGCGCGCTTCGCTC	82
MB-ODN4/5-9	TTTCGCGCGCGCGCTTCGCGCTC	83
MB-ODN4/5-10	GCCTGCGCGCGCGCTTCGCGCTC	84
MB-ODN4/5-11	GCCTGCGCGCGCGCTTCGCGCTC	85
MB-ODN4/5-12	TTTCGCGCGCGCGCTTCGCGCTC	86
MB-ODN4/5-13	GAATGCGCGCGCGCTTCGCGCTC	87
MB-ODN4/5-14	TTTCGCGCGCGCGCTTCGCGCTC	88
MB-ODN4/5-15	TTTCGCGCGCGCGCTTCGCGCTC	89
MB-ODN4/5-16	AGCAATGCGCGCGCGCTTCGCTC	90
MB-ODN4/5-17	CGCAACGCGCGCGCGCTTCGCTC	91
MB-ODN4/5-18	CTCACTGCGCGCGCGCTTCGCTC	92
MB-ODN4/5-19	ATGCTGCGCGCGCGCTTCGCGCTC	93
MB-ODN4/5-20	GCCTTCGCGCGCGCGCTTCGCGCTC	94
MB-ODN4/5-21	GAATGCGCGCGCGCTTCGCGCTC	95
MB-ODN4/5-22	CTTCGCGCGCGCGCTTCGCGCTC	96
MB-ODN4/5-23	GAATGCGCGCGCGCTTCGCGCTC	97
MB-ODN4/5-24	CACTTCGCGCGCGCGCTTCGCGCTC	98
MB-ODN4/5-25	CTAGCGCGCGCGCGCTTCGCGCTC	99
MB-ODN4/5-26	CAACGCGCGCGCGCGCTTCGCGCTC	100
MB-ODN4/5-27	CTAGCGCGCGCGCGCTTCGCGCTC	101
MB-ODN4/5-28	CAACGCGCGCGCGCGCTTCGCGCTC	102
MB-ODN4/5-29	GCCTGCGCGCGCGCGCTTCGCGCTC	103
MB-ODN4/5-30	TAAGCGCGCGCGCGCTTCGCGCTC	104
MB-ODN4/5-31	AGCAATGCGCGCGCGCTTCGCGCTC	105
MB-ODN4/5-32	CTTCGCGCGCGCGCGCTTCGCGCTC	106
MB-ODN4/5-33	CTGCGCGCGCGCGCGCTTCGCGCTC	107
MB-ODN4/5-34	CGCAACGCGCGCGCGCTTCGCGCTC	108
MB-ODN4/5-35	CGAGCGCGCGCGCGCTTCGCGCTC	109

ODN	Sequence	
MB-ODN5/5-1	CACTGCGCGCGCGCGCTTCGCTC	111
MB-ODN5/5-2	CAAGCGCGCGCGCGCTTCGCTC	112
MB-ODN5/5-3	CACTGCGCGCGCGCTTCGCGCTC	113
MB-ODN5/5-4	CAAGCGCGCGCGCGCTTCGCGCTC	114
MB-ODN5/5-5	CGAGCGCGCGCGCGCTTCGCGCTC	115
MB-ODN5/5-6	TGCTGCGCGCGCGCTTCGCGCTC	116
MB-ODN5/5-7	ACAGCGCGCGCGCGCTTCGCGCTC	117
MB-ODN5/5-8	TAGCGCGCGCGCGCGCTTCGCTC	118
MB-ODN5/5-9	TCAAGCGCGCGCGCGCTTCGCTC	119
MB-ODN5/5-10	ATCTGCGCGCGCGCTTCGCGCTC	120
MB-ODN5/5-11	CGCTGCGCGCGCGCTTCGCGCTC	121
MB-ODN5/5-12	TAGCGCGCGCGCGCGCTTCGCTC	122
MB-ODN5/5-13	ATCTGCGCGCGCGCTTCGCGCTC	123
MB-ODN5/5-14	CGCTGCGCGCGCGCTTCGCGCTC	124
MB-ODN5/5-15	TGCTGCGCGCGCGCTTCGCGCTC	125
MB-ODN5/5-16	CAAGCGCGCGCGCGCTTCGCGCTC	126
MB-ODN5/5-17	CACTGCGCGCGCGCGCTTCGCTC	127
MB-ODN5/5-18	TGCTGCGCGCGCGCTTCGCGCTC	128
MB-ODN5/5-19	CTGCGCGCGCGCGCTTCGCGCTC	129
MB-ODN5/5-20	TGCTGCGCGCGCGCTTCGCGCTC	130
MB-ODN5/5-21	AACTGCGCGCGCGCGCTTCGCGCTC	131
MB-ODN5/5-22	ATCACTGCGCGCGCGCTTCGCTC	132
MB-ODN5/5-23	AACTGCGCGCGCGCGCTTCGCTC	133
MB-ODN5/5-24	CTGCGCGCGCGCGCTTCGCGCTC	134
MB-ODN5/5-25	TGCTGCGCGCGCGCGCTTCGCTC	135
MB-ODN5/5-26	CTGCGCGCGCGCGCTTCGCGCTC	136
MB-ODN5/5-27	TGCTGCGCGCGCGCGCTTCGCGCTC	137
MB-ODN5/5-28	GCCTGCGCGCGCGCGCTTCGCGCTC	138
MB-ODN5/5-29	TGCTGCGCGCGCGCGCTTCGCGCTC	139
MB-ODN5/5-30	CGAGCGCGCGCGCGCTTCGCGCTC	140
MB-ODN5/5-31	ACAGCGCGCGCGCGCTTCGCGCTC	141
MB-ODN5/5-32	AGCAATGCGCGCGCGCTTCGCGCTC	142
MB-ODN5/5-33	ATCTGCGCGCGCGCGCTTCGCGCTC	143
MB-ODN5/5-34	CTCTGCGCGCGCGCGCTTCGCGCTC	144
MB-ODN5/5-35	CGAGCGCGCGCGCGCTTCGCGCTC	145
MB-ODN5/5-36	CTGAGCGCGCGCGCGCTTCGCGCTC	146

REPLACEMENT SHEET

4/15

FIG. 4



REPLACEMENT SHEET

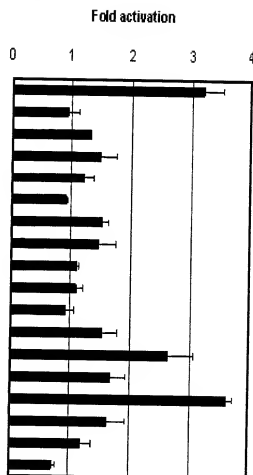
5/15

FIG. 5

a)

		SEQUENCE ID No.:
ODN	Sequence	
MB 4/5 #31	AGCAGCGTTCGGTGTGGGCT	147
#31.1	CAGCTCGTTCGGTGTGGTGT	148
#31.2	TGTGGCGTTCGGTGTGGTGT	149
#31.3	TGCAGCGTTCGGTGTGGGCT	150
#31.4	GGCCAGCGTTCGGTGTGGGCT	151
#31.5	GAGCAGCGTTCGGTGTGGGCT	152
#31.6	CAGCAGCGTTCGGTGTGGGCT	153
#31.7	TATGTGGTTCGGTGTGGTGT	154
#31.8	AGGGCGTTCGGTGTGGGCT	155
#31.9	ATTGTGGTTCGGTGTGGGCT	156
#31.10	GGTGGCGTTCGGTGTGGGCT	157
#31.11	ATGGGCGTTCGGTGTGGGCT	158
#31.12	GATTCGGTTCGGTGTGGGCT	159
#31.13	GGCAGCGTTCGGTGTGGGCT	160
#31.14	TGACTCGTTCGGTGTGGGCT	161
#31.15	GTCATCGTTCGGTGTGGGCT	162
#31.16	TTCAGCGTTCGGTGTGGGCT	163
#31.17	CAGCAGCGTTCGGTGTGGGCT	164

b)



REPLACEMENT SHEET

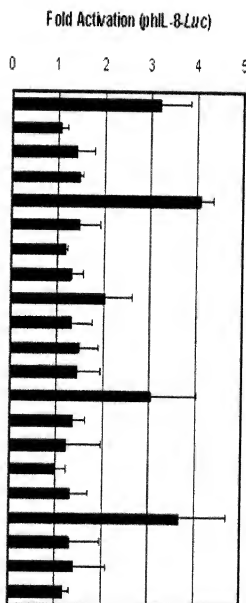
6/15

FIG. 6

a)

ODN	Sequence	SEQUENCE ID No.:
MB-ODN 31(O)	AGCAGCCTTCCTGTCCGCCT	165
MB-ODN 31(M)	AGCCTTCCTGTCCGC	166
#31-CG-1	AGCAGCCTTCCTGTCCGCCT	167
#31-CG-2	AGCAGCCTTCCTGTCCGCCT	168
#31-CG-3	AGCAGCCTTCCTGTCCGCCT	169
#31-CG-4	AGCAGCCTTCCTGTCCGCCT	170
#31-CG-5	AGCAGCCTTCCTGTCCGCCT	171
#31-CG-6	AGCAGCCTTCCTGTCCGCCT	172
#31-CG-7	AGCAGCCTTCCTGTCCGCCT	173
#31-A-1	AGCAGCCTTCCTGTCCGCCT	174
#31-A-2	AGCAGCCTTCCTGTCCGCCT	175
#31-A-3	AGCAGCCTTCCTGTCCGCCT	176
#31-B-1	AGCAGCCTTCCTGTCCGCCT	177
#31-B-2	AGCAGCCTTCCTGTCCGCCT	178
#31-B-3	AGCAGCCTTCCTGTCCGCCT	179
#31-C-1	AGCAGCCTTCCTGTCCGCCT	180
#31-C-2	AGCAGCCTTCCTGTCCGCCT	181
#31-C-3	AGCAGCCTTCCTGTCCGCCT	182
#31-D-1	AGCAGCCTTCCTGTCCGCCT	183
#31-D-2	AGCAGCCTTCCTGTCCGCCT	184
#31-D-3	AGCAGCCTTCCTGTCCGCCT	185

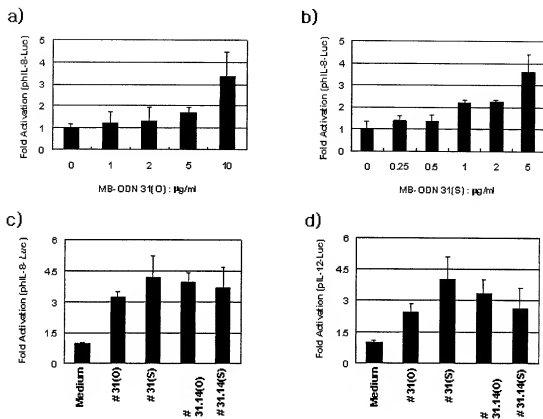
b)



REPLACEMENT SHEET

7/15

FIG. 7

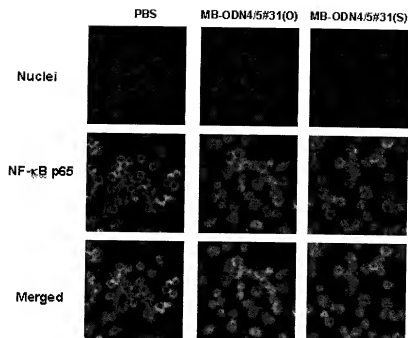


REPLACEMENT SHEET

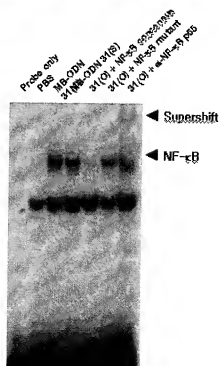
8/15

FIG. 8

a)



b)



REPLACEMENT SHEET

9/15

FIG. 9

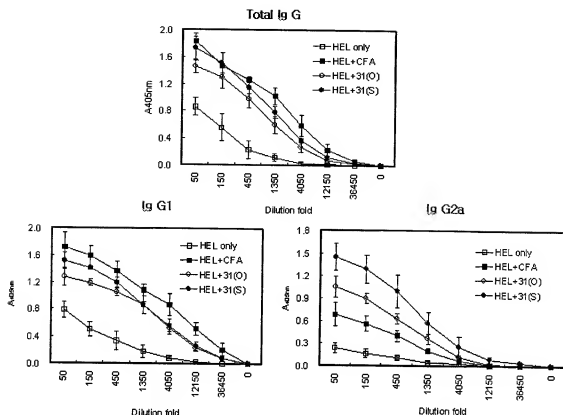
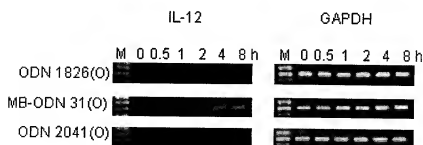


FIG. 10



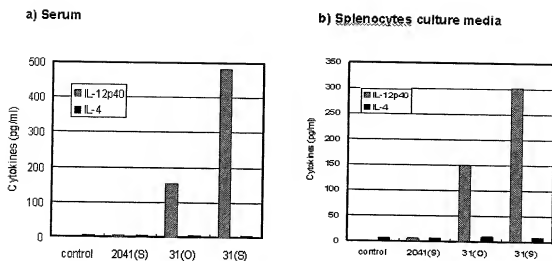
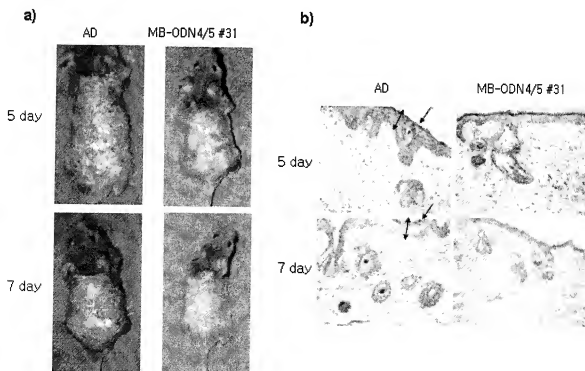
10/15
FIG. 11

FIG. 12



REPLACEMENT SHEET

11/15
FIG. 13

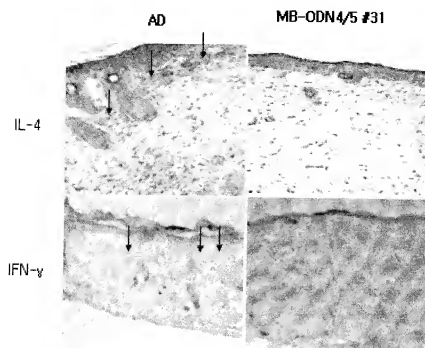
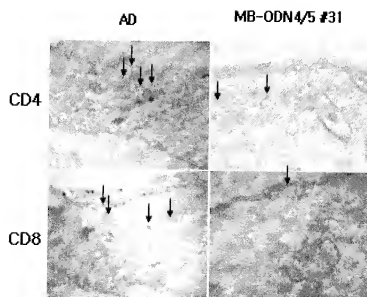


FIG. 14



REPLACEMENT SHEET

12/15
FIG. 15

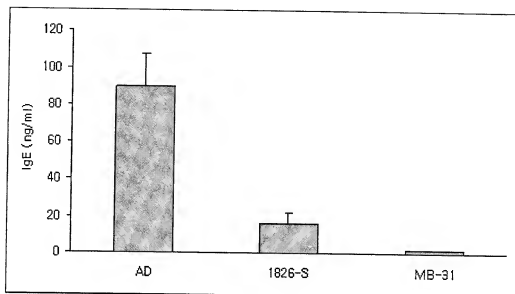
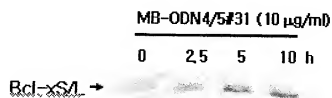


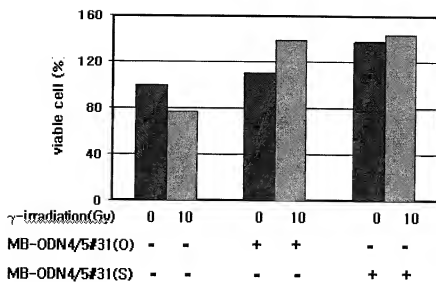
FIG. 16



13/15

FIG. 17

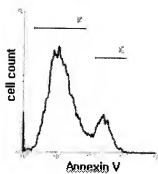
MTT assay



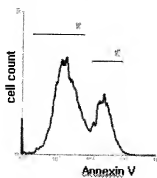
REPLACEMENT SHEET

14/15
FIG. 18

A) Control, 0 Gy



B) Control, 10 Gy



C) MB-ODN4/5#31(S), 10Gy

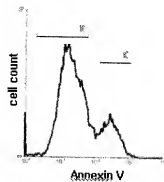
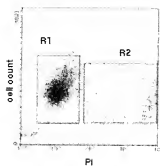


Fig.	γ -irradiation	MB-ODN 4/5 #31(S)	Marker	%Total
A	0 Gy	(-)	M1	73,54
			M2	16,709
B	10 Gy	(-)	M1	58,82
			M2	27,24
C	10 Gy	(•)	M1	65,25
			M2	18,71

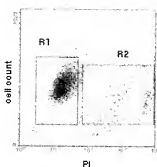
REPLACEMENT SHEET

15/15
FIG. 19

A) Control, 0 Gy



B) Control, 10 Gy



C) MB-ODN4/5#31(S), 10Gy

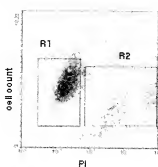


Fig.	γ - irradiation	MB-ODN 4/5 #31(s)	Region	%Total
A	0 Gy	(-)	R1 R2	73,30 16,32
B	10 Gy	(-)	R1 R2	58,93 25,33
C	10 Gy	(+)	R1 R2	62,82 20,92